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ABSTRACT

Summaries are given of the results of a two-year feasibility study of the effectiveness of the lay-reader program in helping students improve their writing skills. The findings of the two-year study show that: (1) there was no significant difference statistically among students who had lay reader service and those who had participated in other treatments; and (2) teachers with lay readers were able to have faster correction of papers and more conferences with students, while teachers with educational assistants had greater and more varied curriculum improvements. Recommendations of the study are that funds should be allocated for programs that produce student growth that is statistically significant; and various staffing patterns to utilize both human and material resources should be instituted. The complete documents which are summarized in this publication are also available on a limited basis; these are, Publication No. TAC 70-1852, "Comparison of the Lay Reader Treatment with Other Treatment in Increasing Student Growth in Writing, 1968-1969; and Publication No. TAC 70-1853, "The Use of Two Types of Paraprofessionals in Promoting Student Growth in Writing, 1969-1970." (DB)

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THE COMPOSITION STUDY

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Summaries of

Comparison of the Lay Reader Treatment With Other Treatments in Increasing Student Growth in Writing, 1968-1969

and

The Use of Two Types of Paraprofessionals in Promoting Student Growth in Writing, 1969-1970

Office of Instructional Services · Department of Education · State of Hawaii · September 1970

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THE COMPOSITION STUDY

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FOREWORD

Innovations introduced into the schools may tend to remain long after newer, more effective innovations have been devised.

The lay reader program was an innovation in Hawaii in 1962, when team teaching, nongrading and flexible scheduling were not yet being implemented in our English classes.

To determine whether the lay reader program is the most effective and efficient way today of helping students improve in their writing skills, the Department of Education conducted a two-year Feasibility Study. The results are reported in two parts: (1) Comparison of the Lay Reader Treatment with Other Treatments in Increasing Student Growth in Writing, 1968-1969, and (2) The Use of Two Types of Paraprofessionals in Promoting Student Growth in Writing, 1969-1970.

Students, teachers, counselors, principals, curriculum specialists, Statewide Informational Services (SWIS), and the evaluation and general education divisions of the Office of Instructional Services all assisted in the Study.

Conducting the Study was Dr. Patsy S. Saiki. Evaluators were Dr. Wilma Krauss, Miss Amy Agbayani, and Mrs. Janet Sumida, 1968-69,

and Dr. Nora Hubbard and Mrs. Janet Sumida, 1969-1970. Serving as stenographers during the two-year period were Mrs. Irene Naka, Miss Betsy Nakasone, and Mrs. Kathleen Sagara.

To all who participated we express our appreciation.

Margaret Y. Oda
Director
General Education Branch

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Assistant Superintendent
Office of Instructional Services

COMPARISON OF THE LAY READER TREATMENT WITH OTHER TREATMENTS IN INCREASING STUDENT GROWTH IN WRITING, 1968-1969

SUMMARY

Office of Instructional Services
DEPARTMENT OF EDUCATION
Honolulu, Hawaii

September, 1970

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SUMMARY

NEED FOR THE STUDY

Hawaii's educational system has allocated approximately $25,000 each year since 1962 for the lay reader program without significant statistical data attesting to the program's effectiveness. This $25,000 went to lay readers who read and corrected student themes outside the classroom. It was not mandatory that lay readers meet with students to discuss their writing.

The 1968-1969 Composition Study was designed and implemented to determine whether funds expended for the lay reader treatment increased student growth in writing more than funds expended for other treatments for the same purpose.

COMPOSITION STUDY GOALS

The Study was to assess the effectiveness of different treatments in promoting student growth in writing. Specifically, the Study was to determine whether the use of a lay reader as a paraprofessional can improve a student's writing skills more than use of other types of personnel or resources.

STUDY TREATMENTS

The three experimental treatments used were:

1. Use of lay readers who read and commented on student themes. It was mandatory that lay readers meet with students to discuss the themes.
2. Use of tape-recorded comments made by teachers. Each teacher received ten tape recorders. Each student received a cassette.
3. Use of reduced class loads. Each teacher taught 100 students.

A control group with normal class loads* was also used.

DESCRIPTION OF TEACHERS IN THE STUDY

Third- and fourth-year teachers who taught sophomore classes categorized as "average" or "above average" were selected. Third- or fourth-year teachers are no longer under direct supervision of Beginning Teacher Supervisors in the Department of Education. The control group teachers were not subject to this limitation.

The teaching and educational background was expected to be most similar at this point in a teacher's career.

Twenty-two teachers from three Oahu districts participated in the Study.

*"Normal class loads for the lay reader, tape recorder, and control groups ranged from 28 to 40 students per class. Teachers usually taught six such classes.

DESCRIPTION OF STUDENTS IN THE STUDY

Sophomores categorized as "average" (A) or "above average" (AA) classes and studying under the teachers selected were used. What was "average" in one school did not necessarily correspond with what was "average" in another school.

AA and A students were selected because composing in this Study meant (1) selecting relevant and meaningful ideas as they relate to the author's purpose in writing the theme, (2) organizing these ideas logically, and (3) selecting diction, tone, and style appropriate for the purpose and to the reading audience. Since emphasis was on these highly complex skills, rather than on the mechanics of writing (grammar and usage, punctuation, spelling, and capitalization), the average and above students were selected.

There were 169 AA and 413 A students in the lay reader treatment, 300 AA and 300 A students in the reduced class load treatment, and 124 AA and 240 A students in the tape-recorder treatment. The control group had 746 AA and A students, making a total of 2,292 students in the Study.

DESCRIPTION OF LAY READERS IN THE STUDY

Lay readers were college graduates who had at least 12 credits in English. The six lay readers had received from 12 to 48 English credits, with a mean of 29 hours for the six.

Each lay reader was assigned to one school and to one teacher.

DESCRIPTION OF THE WRITING PROGRAM

The state coordinator, working with a University professor who served as consultant to the Study and with a team of English department chairmen and teachers, compiled eight writing lessons which were to serve as the major themes for the eight months of the Study. No limitations were placed on other writing; no monitoring was done except through incidental visits to classrooms.

Copies of the writing lessons are appended to this Study.

INSERVICE TO TEACHERS AND LAY READERS

A series of four Saturday morning workshops was held in September, December, February and April for teachers and lay readers. The workshops focused on (1) objectives of the Study, (2) evaluation techniques, (3) problems encountered during the Study, and (4) evaluation of teacher and lay reader evaluations of student themes.

Both teachers and lay readers received copies of (1) Composition Guide, (2) Guide for Lay Readers and Teachers, (3) Diederich Scale for Grading Compositions, and (4) the eight composition assignments.

In addition, the university consultant was made available for school visitations and workshops.

PROCEDURE USED IN THE STUDY

After selection of teachers, students, lay readers and the writing curriculum, participating students were administered the Sequential Test

of Educational Progress (STEP) and the School and College Ability Test (SCAT) in September. The STEP was administered again in May.

Three independent raters evaluated student papers written in September and again in May, using the Diederich Scale.

Except for the eight writing assignments, students were given regular English instruction.

To test the hypothesis of no statistical difference in the achievement of composition writing among the four treatment groups, the following analyses were made:

1. To measure the change in writing scores between the two time periods, the absolute or arithmetic difference between the two scores was used for the four treatment groups.
2. Coefficients of correlation were computed to determine the degree of relationship among the four major components of composition writing: content, mechanics, style, and organization.
3. Coefficients of determination were computed to determine the amount of variance in the summary change score attributable to the four major components of composition writing.
4. The analysis of variance was computed to find the statistical differences in means among the four groups for their achievement in composition writing.

5. The stepwise discriminant analysis was computed to find the statistical differences among the four groups according to the four components in writing.

6. Four separate factor analyses were computed to classify the 214 variables in the study according to the major dimensions of the data and to reduce the data into orthogonally related dimensions so as to insure better regression predictions in a later analysis. The rotated factors or dimensions delineate distinct clusters of interrelations and orthogonal rotation define patterns which are uncorrelated with each other.

7. To predict changes in composition writing scores, the regression analysis program utilized was the BMDO2 Stepwise Regression. A sequence of multiple linear regression equations was computed in a stepwise manner, adding the variable to the regression equation which makes the greatest reduction in the error sum of squares and which has the highest F - value. To compute the multiple regression equations the 214 independent variables representative of the dimensions delineated in the orthogonal factor analyses were used. These variables were grouped according to four categories:

    a. Teacher characteristics and attitudes
    b. Student attitudes
    c. Student characteristics; home, class, school environment
    d. Student achievement scores

The five change scores which are the dependent variables in the regression analyses were: summary, content, organization, style and mechanics. The first regression used all 24 variables representing variables from each of the dimensions of the four categories of data: a, b, c, and d . A subsequent regression equation was computed excluding the achievement score to evaluate the contribution of the various attitude and characteristic variables.

The variables are delineated in the Code Book appended to this Study.

FINDINGS OF THE STUDY

The three treatment groups and the control group did not show any statistical difference in means on the composition change scores in the one-way analysis of variance and also in the step-wise discriminant function analysis.

The descriptive analysis of the means of each of the four treatment groups did indicate, however, that the lay reader treatment group showed the highest increase in summary change scores. This group was followed by the tape-recorder group, the control group, and, finally, the reduced class load group.

The tape-recorder group had the highest positive change in the writing aspects of content and mechanics; the lay reader group had the

highest positive change in organization; and the reduced class group had the highest change in style and tone.

Past student achievement scores such as STEP Writing, 9th and 10th grade language arts scores, and SCAT verbal predicted the composition change scores well, as 95% of the variance in the summary change score was explained by these variables.

For the attitude and background characteristics of students, teachers, home and environment, the three highest contributors to the variance explained in the summary change score were (1) plans to go to college, (2) frequent use of the class period in which to begin assignments, and (3) comments made directly to students by teachers or lay readers. If a student aspired to go to college, if he had been a past high achiever, and if he received direct help from the teacher while still in the beginning stages of his writing, he made the greatest gains during the year.

Cost of the lay reader treatment for 582 students was $5,731.20, or about $9.85 per student. Cost for the reduced class load for 600 students was $12,299.81, or $20.49 per student. Cost for the tape recorder group of 364 students was $2,239.81 or $6.19 per student. Tape recorders and cassettes remain in the school system, and have a use expectancy of five years without necessity of major repairs.

Funds were not expended on the control group except for evaluation purposes.

IMPLICATIONS AND RECOMMENDATIONS

The Study shows that different treatments produced different results, i.e., different treatments produced growth in different aspects of writing, such as in content development, organization, or style.

The Tape Recorder Group

Students who listened to taped comments improved more than the other students in the area of mechanics, which includes grammar and usage, capitalization, spelling, and punctuation. Teachers reported that students were given the opportunity to listen more than once to the tape which accompanied their "corrected" themes. Instead of using single words such as "awkward" or "agreement" on student papers, teachers explained why the particular sentence was awkward and how it could be improved.

The findings showed that students in the tape recorder classes also improved more than students in the other classes in the development of adequate and satisfactory content. Again, the personal suggestions of the teacher directed to each student on a particular piece of writing seemed to have produced good results.

A recommendation based on the use of tapes in evaluation is that all students be allowed to have at least some of their themes reviewed extensively on tape. So that a maximum number of students can be serviced with a minimum number of tape recorders, it is suggested that a center be accessible to students during their independent study periods. Students, in charge of their own cassettes, would be able to listen to teacher comments in privacy if earphones are available. Preferably, the center would be manned by an educational assistant.

The Small Class Load Group

The small class load students improved in their style and diction more than the other three groups. The assumption here is that the teachers were able to work with individuals or with small groups in aspects of writing such as tone and diction appropriate for the purpose and the audience. Questions and answers could have been used to decide upon choice of words and sentence structure.

It is recommended that such conferences be made available to each student several times during the year.

The Lay Reader Group

The lay reader group improved in organization of ideas. One school focused on this aspect primarily. The lay reader worked with each student consistently on this aspect.

It is recommended that teachers note major areas of student errors and work consistently in this area until improvement is visible.

Organizational Recommendation

Since different treatments produce different results, and since these treatments can take place in the same classroom, it is recommended that less emphasis be placed on the plea for smaller class loads and more emphasis be placed on the use of different teaching techniques, including team teaching.

Should a team approach be used, a teacher experienced in the large group lecture can be selected as one member of the team.

To complement her talents, another teacher experienced in the one-to-one conference as well as in evaluating writing can be selected to work with individual students. A third teacher experienced in drawing out student ideas can lead in group discussions for development and organization of these ideas for greater effectiveness. In such a team organization, students would work and learn in more than one area of the language arts, e.g. literature, since team members would have different talents and strengths. (See student comments in Appendix H of the Study.)

Besides teacher organization, another recommendation involves student organization. Students grouped with one another for the whole year in classes labelled "average," "below-average," or "above-average" begin to identify themselves with the label and to think of themselves as such. Frequent shifting of groups will allow students to listen to ideas of different students. Such shifting will make it difficult for teachers to "grade" students in comparison to other students, and a more individualized writing program for each student may be devised.

Instead of the traditional 30-to-1 teacher classroom or the sought after 20-to-1 teacher classroom, English department chairmen should experiment with new organizational patterns and grouping methods, and with ways of utilizing teachers, paraprofessionals available, facilities, material resources, and teaching techniques.

Inservice Recommendation

A recommendation stemming from the workshops held during the year is that teachers be given in-service workshops in writing. The workshops could be conducted (1) by a university professor acquainted with high school student writing done on all levels, not just the college bound, or (2) English department chairmen or teachers with special interests and talent in the teaching of writing. Workshops spaced throughout the year were said to be more valuable than a one-week or two-week long workshop.

Use of Other Paraprofessionals

It is also recommended that instead of the lay reader being the only paraprofessional used for the improvement of writing, the educational assistant be investigated. If teachers are the professionals, and writing is a highly complex skill, then teachers perhaps should take leadership in the teaching of writing. To assist the teacher, educational assistants can be assigned to perform less complex clerical, monitorial, and audio-visual chores, giving teachers more time for such assessment of writing.

It is therefore suggested that for the year 1969-1970, another type of paraprofessional be offered to teachers: the educational assistant. This gives teachers of writing an alternative: (1) to have lay readers read and evaluate student themes, or (2) to have educational assistants provide assistance to teachers so that teachers have more time to read and to evaluate student themes.

THE USE OF TWO TYPES OF PARAPROFESSIONALS IN PROMOTING STUDENT GROWTH IN WRITING, 1969-1970

SUMMARY

Office of Instructional Services
DEPARTMENT OF EDUCATION
Honolulu, Hawaii

September, 1970

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SUMMARY

1969-1970 COMPOSITION STUDY

STUDY GOALS

The goal of the second-year Composition Study was to assess the relative contributions of lay readers and educational assistants (two groups of paraprofessionals) to teachers in their attempt to help high school students improve in their composition writing.

The lay reader would read and evaluate student writing; the educational assistant would do clerical and other chores for the teacher so that the teacher himself would be able to spend more time on helping students in improving writing skills.

STUDY DESIGN

Oahu districts were notified that state-funded lay readers and educational assistants would be assigned to those schools which signified they had plans for improving writing skills. Ten schools responded: seven schools were assigned lay readers and four were assigned educational assistants. One school had both a lay reader and an educational assistant.

Schools were asked to state what they desired to achieve. Those given lay readers said they would:

1. Increase individualization of writing activities in "low-ability" sophomore classes;

2. Make possible more student opportunities for writing, with prompt evaluation of written work and more rigorous attention to the process of composing;

3. Relieve "overloaded" teachers from the abundance of student themes;

4. Assist student in writing activities for other school subjects;

5. Develop self-direction in students.

Those requesting educational assistants said they would:

1. Experiment with alternative programs and approaches in the teaching of English;

2. Create, expand, or revise existing units in writing to meet the needs of the "below-average" students and potential drop-outs;

3. Construct visual aids and other supplementary material; and

4. Create courses which would give a greater share of responsibility of learning to the students.

DESCRIPTION OF TEACHERS

Only those teachers who wrote proposals stating their objectives and describing the procedures they would use to attain those objectives were assigned lay readers and educational assistants. Fourteen teachers used educational assistants while sixteen used lay readers in their classrooms.

DESCRIPTION OF STUDENTS

2,442 freshmen, sophomores, juniors, and seniors assigned to the teachers accepted into the program were used. They were in four Oahu districts. Students ranged from those in "honors" classes to those in "below-average" and potential drop-out classes.

THE PARAPROFESSIONALS

The lay readers are college graduates with at least 12 college credits in English. They received $3.60 per hour for their services. Educational assistants are high school graduates who received $345.00 per month for full-time daily service. The cost of the paraprofessionals was equated by having the lay reader work 96 hours for a total of $345.00 per month. Six educational assistants and eight lay readers were employed in the study.

DESCRIPTION OF THE WRITING CURRICULUM

The writing curriculum was left to the individual teacher, and differed from school to school and from class to class, depending upon the teacher and the grade level, ability and interests of the students.

IN-SERVICE TO TEACHERS AND LAY READERS

One Saturday morning was devoted to explaining the goals of the study and the techniques of theme evaluation. In addition, the Lay Reader Guide was distributed to teachers and lay readers.

Not all teachers attended, although all lay readers were present. Educational assistants received on-the-job training from the teachers to whom they were assigned, since they were not available for duty until the first of January.

PROCEDURES OF THE STUDY

Five instruments were used to evaluate treatment effects in the present study. Student output in composition writing was measured in terms of pre-post differentials in the STEP-Writing Test (administered in September and May), and in the student checklist "Personal Progress in Writing Skills" (administered in February and May). In the checklist, the students related themselves on a seven-point scale according to their perception of their abilities in 21 skills.

Teachers, educational assistants and lay readers completed three evaluation forms:

a. Composition Study Survey, Form B, which measured the program's contribution to student needs.

b. Documentation of Problems Encountered, Form D, in which problems related to the involvement of lay readers and educational assistants in the writing program were requested.

c. Summary of Attempted or Ongoing Innovative Instructional Practices, Form C, in which contributions of the composition program toward instructional practices were requested.

LIMITATIONS OF THE STUDY

The educational assistant groups were comprised chiefly of low ability and low achievement students because of the nature of the teachers' objectives--that of creating courses and material for those students with special needs. Assistants were not available to teachers until January.

The lay readers were assigned to students with higher abilities and achievement scores and were assigned to teachers in September.

RESULTS OF THE STUDY

Students in both the lay reader and educational assistant groups showed significant gains in STEP-Writing scores at the tenth grade, which corresponds to state norms, but not at the twelfth grade level, again which corresponds to state norms.

Both treatment groups stated they perceived gains in all the 21 writing skills in the instrument, "Personal Progress in Writing Skills." The students rated themselves highest on writing skills which related to organizing ideas. However, they felt they were poor in using sources of information such as textbooks and the dictionary to validate their use of grammar and spelling. Twelfth graders showed higher self-perception of their writing skills than students in grades nine to eleven.

According to the Composition Study Survey, teachers reported that the two groups of auxiliary personnel made contributions to instructional practices and provided for student needs. The educational assistants helped achieve the objective of individualized instruction by providing varied timely and pertinent instructional materials. The lay readers helped by meeting with students and discussing areas of major weaknesses and how to remedy these.

In Documentation of Problems Encountered, teachers stated lay readers were not always qualified to work with high school students. Also, teachers felt post-testing of two hours was too long.

In describing innovations that took place, teachers gave evidence of long-range curriculum changes which will affect students in the years following that of the study. Examples of such changes are appended to the study.

IMPLICATIONS AND RECOMMENDATIONS

The need of the teachers for assistance in the classroom has been well publicized; however, the nature of such assistance needs to be continuously re-examined. Different patterns of organization may be an alternative to the use of lay readers or of educational assistants. The use of upperclassmen and the more extensive use of dyads may also be

another alternative that can contribute not only in academic areas but in developing a positive self-concept for helpers (upper level students) and better communication with peers.

The role of the lay reader also needs to be re-examined, since the required tasks of the lay reader are comparable to those performed by the teacher. In the 1969-70 study, the lay reader-teacher relationship appeared more difficult than that with the educational assistant. Problems related to the background and qualifications of the lay reader were documented by the teachers.

Given a choice of paraprofessionals or of other material or human resources resulting in the same cost to the State, teachers may have other alternatives to the lay reader.

Therefore, based on (1) the documentation by teachers of the type of assistance given by the two groups of paraprofessionals toward student needs, (2) the units and curriculum revision done by teachers with educational assistants, and (3) changes in organizational structure put into effect as reported chiefly by teachers with educational assistants, it is recommended that:

1. if long-reaching and varied results are desired, the educational assistant be employed;

2. if immediate year-to-year assistance to alleviate the teacher's load and to give some assistance to students in the area of writing are desired, the lay reader be employed.

If lay readers are employed, extensive in-service must be provided, or the same type of problems as occurred during the past two years will occur. Also, lay readers must be required to meet for personal conferences during the school day with students and during preparation periods with teachers, or the value of the contributions the lay reader can make is lessened.

Where educational assistants are concerned, these paraprofessionals should be assigned to schools where plans for curriculum or teaching improvement have been documented to some degree, since the greatest contribution to the program this year was by schools which had definite plans and used the assistants to help implement these plans.

It is further recommended that if such conditions cannot be met with reasonable certainty, the lay reader program be dropped and funds be expended on programs that promise greater gains with greater certainty.

TWO-YEAR SUMMARY

To summarize the findings of the two-year study, (1) the first year's study showed that there was no significant difference statistically among students who (a) had lay reader service, (b) had evaluation of writing done via tape, (c) were placed in small classes, and (d) were in control classes, although each treatment produced better results than others in certain aspects of writing (content development, organization, style, and mechanics); and (2) the second year's study showed that given two types of paraprofessionals--the lay reader and the educational assistant--teachers with lay readers were able to have faster correction of papers and more conferences with students, while teachers with educational assistants gave evidence of greater and more varied curriculum improvements such as classroom time and space reallocation, and course, instructional material and activities development.

To summarize the recommendations of the two-year study, (1) the expending of annual funds should be for programs that help to produce student growth that is statistically significant, which the lay reader program has not done; and (2) various staffing patterns to utilize both human and material resources should be instituted, rather than depending upon a lay person to provide highly specialized services.